

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today

- (1) was not written for publication in a law journal and
- (2) is not binding precedent of the Board.

Paper No.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

MAW-KUEN WU and JAMES R. ASHBURN,

Junior Party, 1

MAILED

v.

CHING WU CHU,

Senior Party.²

FEB 24 1999

PAT. & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Patent Interference No. 102,447

FINAL HEARING: July 23, 1998

¹Application 07/014,359, filed February 13, 1987. Assigned to the University of Alabama, Huntsville, AL.

²Application 07/300,063, filed January 23, 1989. Accorded the benefit of U.S. Application 07/012,205, filed February 6, 1987. Assigned to the University of Houston, Houston, TX.

Before PATE, SCHAFER, and HANLON, <u>Administrative Patent Judges</u>. ³ HANLON, <u>Administrative Patent Judge</u>.

FINAL DECISION UNDER 37 CFR § 1.658

This is an interference between Wu et al. (Wu) and Chu. Chu is senior party by virtue of the February 6, 1987, filing date of Application 07/012,205 to which benefit was accorded file-wrapper-continuation Application 07/300,063 filed January 23, 1989, involved in this interference.

The sole count at issue in this interference relates to a superconducting composition and reads as follows:

Count 1

A superconducting composition exhibiting zero electrical resistance at a temperature of 77° K or above having the nominal formula:

Y_ABa_BCu_cO_x

where A is from 1.0 to 1.4; B is from 0.6 to 1.0; C is from 0.8 to 1.2 and X is from about 2 to 4.

³Administrative Patent Judge (APJ) Pate has been substituted for APJ Ronald H. Smith, who has retired, and APJ Schafer has been substituted for APJ Weimar, who has resigned. <u>Compare In re Bose</u>, 772 F.2d 866, 869-70, 227 USPQ 1, 4 (Fed. Cir. 1985); <u>Ex parte Papst-Motoren</u>, 1 USPQ2d 1655, 1655 n.* (Bd. Pat. App. & Int. 1986); <u>Larson v. Johenning</u>, 17 USPQ2d 1610, 1610 n.1 (Bd. Pat. App. & Int. 1990).

The claims of the parties which correspond to Count 1 are:

Wu: claim 1

Chu: 4 claims 18, 21, 24 and 27

Both parties filed records and briefs, Wu also filing a reply brief, 5 and both parties appeared, through counsel, at final hearing for oral argument.

Wu's brief at final hearing raises the following issues (WB1):

- (1) Has Wu proven, by a preponderance of the evidence, possession of the subject matter of Count 1 of the interference prior to February 6, 1987, Chu's effective filing date?
- (2) Are Chu claims 18, 21, 24 and 27, corresponding to Count 1 of the interference, unpatentable for failure to name the proper inventor?
- (3) Has Wu sustained its burden of proof to show Chu derived the invention from Wu?

Chu filed a motion under 37 CFR § 1.633(c)(4) to designate Chu claims 17, 19, 20, 22, 23, 25 and 26 as not corresponding to Count 1 (Paper No. 14). The motion was granted (Paper No. 24), and the interference was redeclared (Paper No. 25) to designate Chu claims 17, 19, 20, 22, 23, 25 and 26 as not corresponding to Count 1.

The Wu brief, the Wu reply brief, and Wu record will be referred to as WB, WRB, and WR respectively, followed by the appropriate page number. The Chu brief and Chu record will be referred to as CB and CR respectively, followed by the appropriate page number. Similarly, Chu exhibits will be referred to as CX followed by the appropriate exhibit number.

Chu's brief at final hearing raises the following issues (CB1):

- (4) Are statements of Torng and Duthie offered by Wu as corroborating evidence, either of a conception and/or actual reduction to practice by Wu prior to Chu's effective filing date of February 6, 1987, factually and/or legally adequate and/or admissible corroborating evidence?
- (5) Has Wu submitted statements which are factually and/or legally adequate and admissible as evidence that prove by a preponderance of the evidence that any person, other than Chu, is an inventor contributing to the subject matter of Chu claims 18, 21, 24 and 27 corresponding to Count 1?
- (6) Has Wu submitted any evidence and corroboration thereof that the particulars of the subject matter of Wu claim 1 corresponding to Count 1 were communicated to Chu prior to Chu's invention of such subject matter?

In addition, Wu filed a motion to compel discovery under 37 CFR § 1.687(b) (Paper No. 46), and both Wu and Chu filed a motion to suppress evidence under 37 CFR § 1.656 (Paper Nos. 52 and 55, respectively). No issue of interference-in-fact was raised at final hearing.

Wu's motion to suppress evidence

Wu filed a motion under 37 CFR § 1.656 to suppress certain evidence submitted by Chu, namely, portions of Meng's declaration

(CR6, \P 11; CR10, \P 21). The motion is <u>dismissed</u> as moot since we have not relied upon the evidence at issue in reaching our decision.

Chu's motion to suppress evidence

Chu filed a motion under 37 CFR § 1.656 to suppress the following evidence (Paper No. 55):

- (A) Torng declaration, paragraph 3, line 9 after "determined" through line 12 to and including " $Y_{1.15}Ba_{0.85}CuO$ " (WR62, lines 5-8).
- (B) Torng declaration, paragraph 5, line 3, the phrase "YBaCuO composition identified above" (WR63).
 - (C) Torng declaration, paragraph 6, lines 2-10 (WR63-64).
 - (D) Duthie declaration, paragraph 4, first sentence (WR67).
- (E) Ashburn declaration, paragraph 8, line 3, the phrase "Wu called Houston, to report the amazing development," and the last two sentences of paragraph 8 (WR8).
- (F) Portions of Meng's testimony (CR11, line 9-CR12, line 5; CR21, line 10-CR23, line 5; CR93, line 12-CR94, line 25; CR118, line 15-CR121, line 1).

The motion is $\underline{\text{dismissed}}$ as moot, with respect to items (A) and (C)-(F) identified above, since we have not relied upon this

evidence in reaching our decision. The motion is <u>denied</u> with respect to item (B) for the reasons set forth below.

According to Chu, item (B) is inadmissible under Fed. R. Evid. 602 because that portion of Torng's declaration has not been shown to be based upon Torng's personal knowledge of the matter at the time alleged (Paper No. 55, p.1). We disagree. Torng testifies (WR63, \P 5):

Ashburn and I together prepared the necessary amounts of oxide for preparation of the YBaCuO composition identified above $[Y_{1.15}Ba_{0.85}CuO]^{\{6\}}$

See also WR7. Consistent with Torng's declaration, Wu argues that (Paper No. 60, p. 2):

Torng made the composition, together with Ashburn. Torng was there, he certainly had personal knowledge of what was done. This is not based on information derived from any other source.

Therefore, we agree with Wu that item (B) is not inadmissible under Fed. R. Evid. 602.

This formula is incorporated by reference to a formula identified in the testimony of item (A) above. Although we rely on the formula in our decision, we do not rely on the allegations set forth in the testimony of item (A), i.e., the decision to pursue specific mixed oxides. Nevertheless, for the reasons set forth hereinafter, the YBaCuO composition prepared by Ashburn and Torng does not fall within the scope of the count.

Issues (1) and (4)

Wu argues that this interference presents a case where conception and actual reduction to practice cannot be separated in time. According to Wu, the count is directed to a composition exhibiting a critical property, namely, zero electrical resistance at temperatures of 77°K or above (WB11). Wu argues that where a count recites properties of a composition as a critical element, predictability of those properties is a requirement for conception (WB7). However, Wu urges that the technology embraced by the subject matter of the count is so new and unpredictable that the inventor would not have known that the composition of the count would exhibit zero electrical resistance at temperatures of 77°K or higher until the subject matter of the count was actually reduced to practice (WB13-14). Wu further argues that in the absence of predictability, conception and actual or constructive reduction to practice occur simultaneously See Amgen, Inc. v. Chugai Pharmaceutical Co., 927 F.2d 1200, 1206-07, 18 USPQ2d 1016, 1021 (Fed. Cir, 1991) ("In some instances, an inventor is unable to establish a conception until he has reduced the invention to practice through a successful experiment. This situation results in a simultaneous conception and reduction to practice."); Alpert v. Slatin, 305 F.2d 891,

894, 134 USPQ 296, 299 (CCPA 1962) ("in view of the nature of the ensuing research this is considered to be one of those unusual cases where the work of conception must be considered to proceed simultaneously with the work of reduction to practice. . . In this type of research the inventor's mind cannot formulate a completed invention until he finally performs a successful experiment."). Wu concludes, and we agree, that any conception, to be complete, must include a demonstration by the inventor that the composition in question exhibits zero resistance at temperatures of 77°K or higher (WB12). Chu has failed to establish otherwise (WRB2; CB32).

Therefore, the dispositive issue in this case is whether Wu has established, by a preponderance of the evidence, an actual reduction to practice of the subject matter of the count prior to February 6, 1987, Chu's effective filing date. Holmwood v. Sugavanam, 948 F.2d 1236, 1238, 20 USPQ2d 1712, 1714 (Fed. Cir. 1991); see also Bosies v. Benedict, 27 F.3d 539, 541-42, 30 USPQ2d 1862, 1864 (Fed. Cir. 1994); Peeler v. Miller, 535 F.2d 647, 651, 190 USPQ 117, 120 (CCPA 1976).

As with conception, a party establishing an actual reduction to practice of the subject matter of a count must show a reduction to practice of <u>each and every</u> limitation of the count.

Coleman v. Dines, 754 F.2d 353, 359, 224 USPQ 857, 862 (Fed. Cir. 1985); Newkirk v. Lulejian, 825 F.2d 1581, 1582, 3 USPQ2d 1793, 1794 (Fed. Cir. 1987); Correge v. Murphy, 705 F.2d 1326, 1329, 217 USPQ 753, 755 (Fed. Cir. 1983); Parker v. Frilette, 462 F.2d 544, 548, 174 USPQ 321, 325 (CCPA 1972); Szekely v. Metcalf, 455 F.2d 1393, 1396, 173 USPQ 116, 119 (CCPA 1972); Schur v. Muller, 372 F.2d 546, 551, 152 USPQ 605, 609 (CCPA 1967). However, where, as here, the count embraces broad ratios of elements of a composition, a reduction to practice of a single composition within the scope of the count constitutes a reduction to practice of the invention defined by the count for purposes of priority of invention in an interference proceeding. Breuer v. <u>DeMarinis</u>, 558 F.2d 22, 24 n.5, 194 USPQ 308, 309 n.5 (CCPA 1977); Mikus v. Wachtel, 504 F.2d 1150, 1152, 183 USPQ 752, 753 (CCPA 1974); Den Beste v. Martin, 252 F.2d 302, 304-05, 116 USPQ 584, 586 (CCPA 1958). In addition, a reduction to practice of the subject matter of a count must be independently corroborated. Mikus v. Wachtel, 542 F.2d 1157, 1159, 191 USPQ 571, 573 (CCPA 1976); see also Reese v. Hurst, 661 F.2d 1222, 1228, 211 USPQ 936, 942 (CCPA 1981) ("adoption of the 'rule of reason' has not altered the requirement that evidence of corroboration must not depend solely on the inventor himself").

According to junior party Wu, Wu arrived at a conception and actual reduction to practice of the subject matter of the count no later than January 29, 1987 (WB14):

The composition having the nominal formula $Y_{1.2}Ba_{0.8}Cu_1O$ was prepared and demonstrated to exhibit substantially zero resistance at a temperature of 77°K on January 29, 1987, by Wu and Ashburn. WR 7, WR 55-56, corroborated at WR 63 and WR 67 [WB6].

Compare Count 1 ("A superconducting composition exhibiting zero electrical resistance at a temperature of 77°K or above having the nominal formula: $Y_ABa_BCu_CO_X$ where . . . X is from about 2 to 4 [emphasis added].").

Junior party Wu relies on the testimony of Dr. Wu which is said to confirm that compositions having a nominal formula falling within the scope of the count were sintered and tested on January 29, 1987. The samples were said to exhibit zero resistance at temperatures of 77°K and higher (WB15). Dr. Wu states (WR54-56):

- 2. Beginning on or about January 19, 1987, and thereafter until January 28, 1987, I, together with James R. Ashburn and C. J. Torng, endeavored to prepare samples of a mixed oxide having the composition $Y_{1.2}Ba_{0.8}Cu_1O_{4-x}$ wherein x is greater than zero and less than 0.25, in the belief that the resulting oxide would exhibit substantially zero resistivity at temperatures at or about, or above, 77°K. [Emphasis added.]
- . . . Attached hereto is a copy of a graph obtained during that [January 29, 1987] testing, the time of the

testing being reflected on the graph itself as 2:08 PM. As clearly illustrated by the graph, substantially zero resistance was obtained at or about temperatures in the vicinity of $77^{\circ}K$. Ashburn and I prepared a second sample in the fashion described in paragraph 3 above, save for the fact that sintering was conducted for a period of 1 - 2 hours, and subjected that sample to testing as well. Attached is a graph reflecting that testing conducted at about 7:28 PM.

The graphs merely identify the samples tested as "Y-Ba-Cu-O" (WR58-59; see also WR52-53).

Wu also relies on the testimony of Ashburn to establish that samples falling within the scope of the count were prepared and exhibited zero resistance at temperatures above 77°K on January 29, 1987 (WB14-15). According to Ashburn (WR5):

During the weekend, and on January 17, 1987, while doing my mathematics homework, I reviewed possible combination of ions to be employed in the superconducting compositions, and identified two possible compositions. These compositions are reflected on the figuring that appears on the back of my mathematics homework, the two pages of which are attached hereto as exhibit A [WR11-12]. As reflected on the back of that document, my thinking had lead to the conclusion that two possible high temperature superconducting mixed oxides would be $Y_{1.15}Ba_{0.85}CuO_y$... [Compare WR11 (" $Y_{1.15}Ba_{.85}CuO$ ").]

Chu argues that the sample tested at 2:08 p.m. appears to exhibit zero electrical resistance at about 50°K (CB18; WR58). Although not forming any basis for our decision of whether Wu demonstrated an actual reduction to practice of the subject matter of the count prior to Chu's effective filing date, we agree with Chu's observation.

Ashburn continues (WR7):

[O]n January 28, 1987, I, together with Torng, prepared a sample of a mixed oxide having the nominal composition $Y_{1.2}Ba_{0.8}CuO$, and placed the preparation in the furnace to sinter. On January 29, 1987, the sample was removed and tested, by myself and Wu, for superconductivity. . . . [T]he sample gave a sharp T_c above 77°K, thus above the temperature of liquid nitrogen. . . [O]n January 29, a second preparation of the YBaCuO composition was prepared, fired for approximately 3 hours at 1000°C and tested. Again, a sharp T_c transition, above 77°K, was observed. The two tests are reflected in exhibit C attached hereto, and as reflected in the graphs, were completed at 2:08 and 7:28 in the afternoon of January 29, 1987.

Wu further relies on Ashburn's notebook as evidence of actual testing of the composition (WRB16). However, in contrast to the above-identified testimony, an examination of Ashburn's laboratory notebook pages reveals that samples of "Yb_{1.2}Ba_{.8}CuO" were tested on January 29, 1987 (WR27).

In addition to the testimony of the inventors, Dr. Wu and Ashburn, Wu relies on the corroborating testimony of Torng⁸ to establish that a composition falling within the scope of the count was prepared prior to Chu's effective filing date.

Wu also relies on the corroborating testimony of Duthie to establish that a YBaCuO composition was tested on January 29, 1987 (WR65-67; WB16-17). Since, for the reasons set forth hereinafter, the composition purportedly tested does not fall within the scope of the count, it is not necessary to examine Duthie's corroborating testimony.

According to Torng (WR63; WB16):

5. On January 28, 1987, yttrium oxide having been obtained, Ashburn and I together prepared the necessary amounts of oxide for preparation of the YBaCuO composition identified above $[Y_{1.15}Ba_{0.85}CuO]$, and put the material in the furnace for overnight sintering.

Based on the evidence of record, Wu concludes that an actual reduction to practice of the subject matter of the count prior to Chu's effective filing date has been established. We disagree.

As pointed out above, to establish an actual reduction to practice of the subject matter of Count 1, Wu must show a reduction to practice of <u>each and every limitation</u> of Count 1.

Newkirk, 825 F.2d at 1582, 3 USPQ2d at 1794; Correge, 705 F.2d at 1329, 217 USPQ at 755; Parker, 462 F.2d at 548, 174 USPQ at 325; Szekely, 455 F.2d at 1396, 173 USPQ at 119; Schur, 372 F.2d at 551, 152 USPQ at 609. Count 1 requires a superconducting composition having the following nominal formula:

 $Y_ABa_BCu_CO_X$

where X is from about 2 to 4.

According to Wu, "a composition of a formula within the scope of the Count of the Interference, $Y_{1.2}Ba_{0.8}CuO$ was in fact prepared by, or under the direction of, the inventive entity" (WRB6). See Declaration of Ashburn, WR7 (on January 29, 1987,

two samples of a mixed oxide having the nominal composition $Y_{1.2}Ba_{0.8}CuO$ were tested); Declaration of Torng, WR63 (on January 28, 1987, a mixed oxide having the composition $Y_{1.15}Ba_{0.85}CuO$ was prepared). However, the composition relied on by Wu to establish an actual reduction to practice of the count, $Y_{1.2}Ba_{0.8}CuO$, where the atomic ratio of oxygen is 1, does not fall within the scope of the count. We further recognize that the composition was sintered during its preparation (WR7; WR63). However, Wu has failed to establish that the sintering process produced a composition falling within the scope of the count.

To the extent that Dr. Wu states that he, Ashburn and Torng "endeavored to prepare samples of a mixed oxide having the composition $Y_{1.2}Ba_{0.8}Cu_1O_{4-x}$ wherein x is greater than zero and less than 0.25 [WR54-55, emphasis added]," the composition said to have exhibited zero electrical resistance at about 77°K is merely identified as "Y-Ba-Cu-O" (WR58-59).

Wu further relies on Ashburn's notebook as independent evidence establishing an actual reduction to practice of the

Chu points out that Ashburn identifies the composition at issue as ${}^{``}Y_{1.2}Ba_{0.8}CuO$," and Torng identifies the composition as ${}^{``}Y_{1.15}Ba_{0.85}CuO$ " (CB12). Since neither composition falls within the scope of the count it is not necessary to resolve any alleged discrepancies between the atomic ratios of Y and Ba in these compositions.

subject matter of the count (WRB16). However, Chu points out that an examination of the notebook (CB13):

[R]eveals only [that] formulas of ytterbium composition[s] -- $Yb_{1.2}Ba_{0.8}CuO$ -- appear therein on a 1/29/87 date. No yttrium containing formula appears.

Compare notebook entry at WR36 ("3/2/87 $Y_{1.2}Ba_{.8}CuO_{[illegible]}$ "). We offers no explanation.

Therefore, Wu has failed to establish, by a preponderance of the evidence, that a composition falling within the scope of the count was actually reduced to practice prior to February 6, 1987, Chu's effective filing date. Holmwood, 948 F.2d at 1238, 20 USPQ2d at 1714; see also Bosies, 27 F.3d at 541-42, 30 USPQ2d at 1864; Peeler, 535 F.2d at 651, 190 USPQ at 120.

Issues (3) and (6)

Wu argues that Chu derived the subject matter of the count from Wu (WB31-32). However, to prove derivation, Wu must establish (1) prior conception of the claimed subject matter and (2) communication of the conception to Chu. Price v. Symsek, 988 F.2d 1187, 1190-91, 26 USPQ2d 1031, 1033 (Fed. Cir. 1993); Hedgewick v. Akers, 497 F.2d 905, 908, 182 USPQ 167, 169 (CCPA 1974); Mead v. McKirnan, 585 F.2d 504, 507, 199 USPQ 513, 515 (CCPA 1978).

Wu claims:

A superconducting composition exhibiting zero electrical resistance above 77°K and consisting essentially of $Y_ABa_BCu_CO_{4-x}$ where A, B and C constitute atomic ratios, and x varies according to the quality 0 < x < 0.25 and wherein A = 1.2,B = 0.8 and C = 1.

Based on the facts of this case, we previously determined that conception of the composition at issue cannot occur without a simultaneous reduction to practice. According to Wu, Wu arrived at a complete conception of the invention as of the date of his actual reduction to practice, January 29, 1987 (WB32). However, the composition said to have been reduced to practice, $Y_{1.2}Ba_{0.8}CuO$, where the atomic ratio of O is 1, does not fall within the scope of Wu's claimed invention.

Having failed to establish an actual reduction to practice of the claimed composition prior to Chu's effective filing date, Wu has also failed to show a prior conception of the composition at issue. Therefore, Wu's case for derivation must fail.

See Davis v. Reddy, 620 F.2d 885, 888-89, 205 USPQ 1065, 1068 (CCPA 1980); Mead, 585 F.2d at 507, 199 USPQ at 515.

Issues (2) and (5)

Wu argues that Chu's claims corresponding to the count are invalid for failure to name the proper inventor. According to Wu, Chu is not the sole inventor of the subject matter of claims

18, 21, 24 and 27 which have been designated as corresponding to Count 1 in this interference. Rather, Wu argues that Chu arrived at the claimed subject matter with the help of Wu, Ashburn, and, perhaps, Meng (WB27-28).

An invention may be the work of two or more joint inventors.

See 35 U.S.C. § 116 (1998). However, each joint inventor must generally contribute to the conception of the invention.

Burroughs Wellcome Co. v. Barr Lab., 40 F.3d 1223, 1227-28,

32 USPQ2d 1915, 1919 (Fed. Cir. 1994). Moreover, the alleged coinventor or co-inventors must prove their contribution to the conception of the claims by clear and convincing evidence.

Ethicon Inc. v. United States Surgical Corp., 135 F.3d 1456,

1461, 45 USPQ2d 1545, 1548 (Fed. Cir. 1998).

It is unclear what junior party Wu regards as its contribution to the conception of Chu's claims. See CX1, pp.3, 6 (suggesting concept of substituting Y for La in a composition of La-Ba-Cu-O to produce a composition of Y-Ba-Cu-O which superconducts at a temperature greater than that of a La-Ba-Cu-O composition). To the extent that Wu's contribution is the observation on January 29, 1987, that the composition Y_{1.2}Ba_{0.8}CuO exhibited zero electrical resistance at 77°K, Wu has failed to establish joint inventorship. See WB27 ("The claims

corresponding to the Count of the Interference are not drawn to an yttrium/barium/copper oxide composition, per se, or a superconductor per se, but rather, a composition of fixed atomic ratios, with exhibition of a substantially zero electrical resistance or Tc, at or above 77°K.").

Chu's claims 18, 21, 24 and 27 are directed to a superconducting composition having the nominal formula:

$Y_aBa_bCu_cO_x$

where "a" is about 1.2, "b" is about 0.8, "c" is about 1.0, and "x" is about 2 to 4. The composition said to have been reduced to practice by Wu, $Y_{1.2}Ba_{0.8}CuO$, where the atomic ratio of oxygen is 1, falls outside the scope of Chu's claimed invention. <u>See Bloom v. Furczyk</u>, 144 USPQ 678, 687 (Bd. Pat. Int. 1955) (conception of an embodiment falling outside the scope of the count did not establish joint inventorship of the counts at issue).

Furthermore, to the extent that Meng identified superconducting compositions for production and testing and prepared the compositions, Wu has failed to establish that Meng is a joint inventor of the subject matter of Chu's claims 18, 21, 24 and 27. According to Meng (CR5-6, ¶ 10):

Dr. Chu instructed me by that telephone call to next prepare, among other substituted compositions, Y-Ba-Cu-O compositions in accordance with the same program by which I had earlier prepared and tested different nominal formulations of La-Ba-Cu-O for superconductive properties.

See also CR42 ("Q. Okay. Without regard to the size of the element, did he [Dr. Chu] give you specific compositional values in terms of the amount of each element to be used in the nominal formula during this phone call that is referred to? A. We -- he talk to me basically we follow the previous lanthanum formula to start with [, the 214]."). Therefore, based on the evidence of record, we agree with Chu that Meng acted in accordance with Chu's instructions when she identified and prepared compositions falling within the scope of Chu's claims (CB27). Wu has failed to establish otherwise. Compare Ethicon, 135 F.3d at 1460-61, 45 USPQ2d at 1548 (to show co-inventorship, the alleged co-inventor must (1) prove his contribution to the conception of the claims by clear and convincing evidence and (2) supply evidence to corroborate his testimony).

Motion to compel discovery

Pursuant to 37 CFR §§ 1.635 and 1.687(b), Wu moves that senior party Chu be directed to produce all documents in the possession of Chu or Chu's real party in interest that would be

responsive to the request for (1) "[c]opies of records of testing of materials that may have been brought by Wu to the University of Houston on January 30, '87" (Paper No. 46, p.1) and (2) "all records of testing conducted at the University of Houston on or in connection with a sample of material provided by Wu and/or Wu and Ashburn on or about January 30, 1987" (Paper No. 46, p.2). According to Wu, the above-identified records are necessary to establish corroboration of conception and reduction to practice of the composition of the count.

At final hearing, junior party Wu indicated its intention to withdraw the motion to compel discovery unless the lack of adequate corroboration in Houston became an issue in this interference. For the reasons set forth above, our decision fails to reach the issue of corroboration of testing performed in Houston on January 30, 1987. Therefore, the motion to compel discovery is <u>dismissed</u> as moot.

<u>Judgment</u>

Judgment as to Count 1, the sole count at issue is awarded in favor of Senior party Ching Wu Chu. On the record before the Patent and Trademark Office in this interference, Senior party

Ching Wu Chu is entitled to a patent containing claims 18, 21, 24 and 27 of Application 07/300,063 filed January 23, 1989, which correspond to Count 1. Junior party, Maw-Kuen Wu and James R. Asbhburn, is not entitled to a patent containing claim 1 of Application 07/014,359 filed February 13, 1987, which corresponds to Count 1.

WILLIAM F. PATE, III

Administrative Patent Judge

ADRIENE LÉPIANE HANLON

Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

SCHAFER, Administrative Patent Judge, specially concurring.

I fully join in my colleagues opinion. I write separately to express my concerns about this interference. My concerns are that we may have decided this interference without the parties' providing us with a clear understanding of the subject matter involved.

The junior party, Wu, asserts that an actual reduction to practice of an embodiment within the scope of the count occurred on January 29, 1987, when Wu made an oxide having the nominal

composition $Y_{1.2}Ba_{0.8}Cu_1O$. My understanding of this formula is that the atoms of the four elements of the oxide are present in the ratio 1.2:0.8:1.0:1.0. The count specifies a composition having the following formula $Y_ABa_BCu_CO_X$. The count further defines A to be 1.0-1.4, B to be 0.6-1.0, C to be 0.8-1.2, and X to be from about 2-4. My understanding of this formula is that the atoms of the oxide must be present in the ratio 1.0-1.4:0.6-1.0:0.8-1.2:2-4. Wu's alleged reduction to practice meets the limitations for Y, Ba, and Cu but not for O. In Wu's composition X is 1. The count requires X to be about 2-4. Wu does not explain the discrepancy. Chu does not attack Wu's evidence as not showing an embodiment within the scope of the count. Yet we are deciding this interference based upon the discrepancy.

I am left with the distinct feeling that I have missed something. So many resources and so much time have been put into what appears to me to be a "no-brainer." This may be a case where the parties have simply not done an adequate job of explaining the relevant terminology to us. What Senior Judge McKelvey said in his concurring opinion in Ex parte CCC, published at http://www.uspto.gov/web/offices/dcom/bpai/its/9x-xxxx.pdf, is equally applicable here. The members of this board are not and

do not have to be experts in the technologies that come before us. We need only be persons of "scientific ability." This means that if the subject matter is explained to us in "plain English" we should, and probably will be able to, understand the technology sufficiently to make an informed decision. I fear we may not have been given the opportunity to do so in this proceeding.

RICHARD E. SCHAFER

Administrative Patent Judge

BOARD OF PATENT APPEALS AND INTERFERENCES

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INTERFERENCE DIGEST

Interference No102,447	Paper No23
Name, Ching Wu Chu	
Serial No07/300.063 Patent No	
Title, HIGH TRANSITION TEMPERATURE SUPER	RCONDUCTING COMPOSITIONS
Filed, January 23, 1989	
Interference with Maw-Kuon Wu et al.	
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DECISION ON MOTION	
Examiner-in-Chief,	Dated,
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QECXXLQNXXQNXQRXQRX FINAL DECISION	₹¥
FINAL DECISION Board of Patent Appeals and Interferences, Favorable	Dated, Feb 24,19
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Court, Dated, _	
REMARKS	
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This should be placed in each application or patent involved in interference in addition to the interference letters.